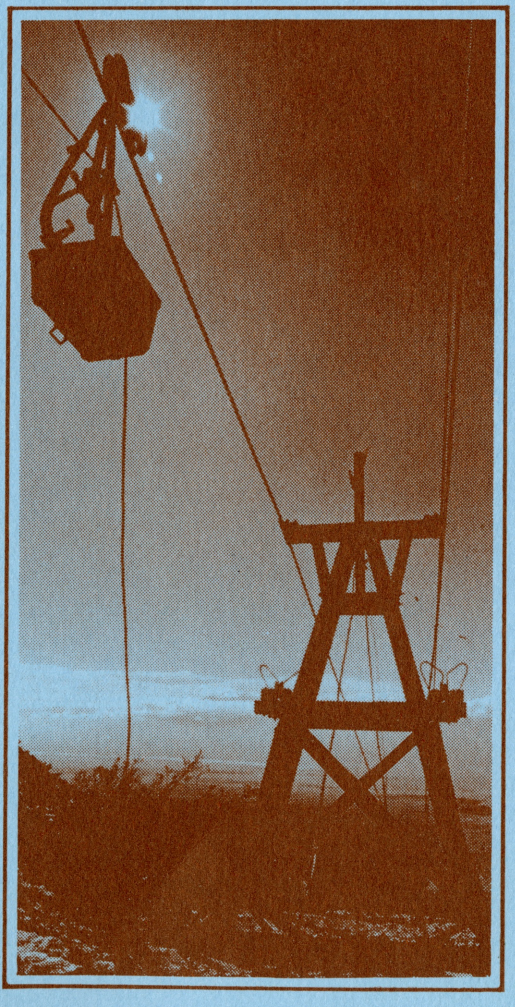
DEATH VALLEY'S
KEANE WONDER MINE ADVENTURE



by

RICHARD H. TULLIS, MD

KEEPSAKE NO. 37

DEATH VALLEY 49ERS
48TH ANNUAL ENCAMPMENT
NOVEMBER 1997

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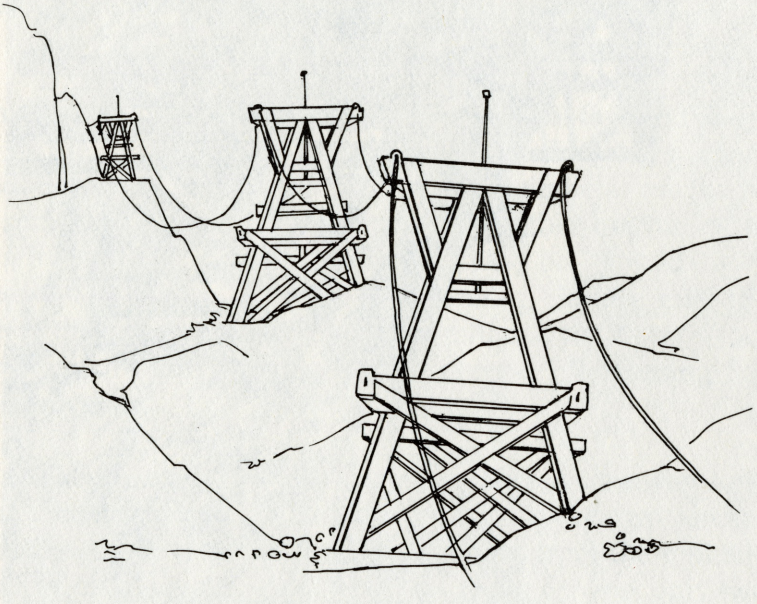
A KEANE WONDER MINE ADVENTURE

BY RICHARD H. TULLIS, M.D.



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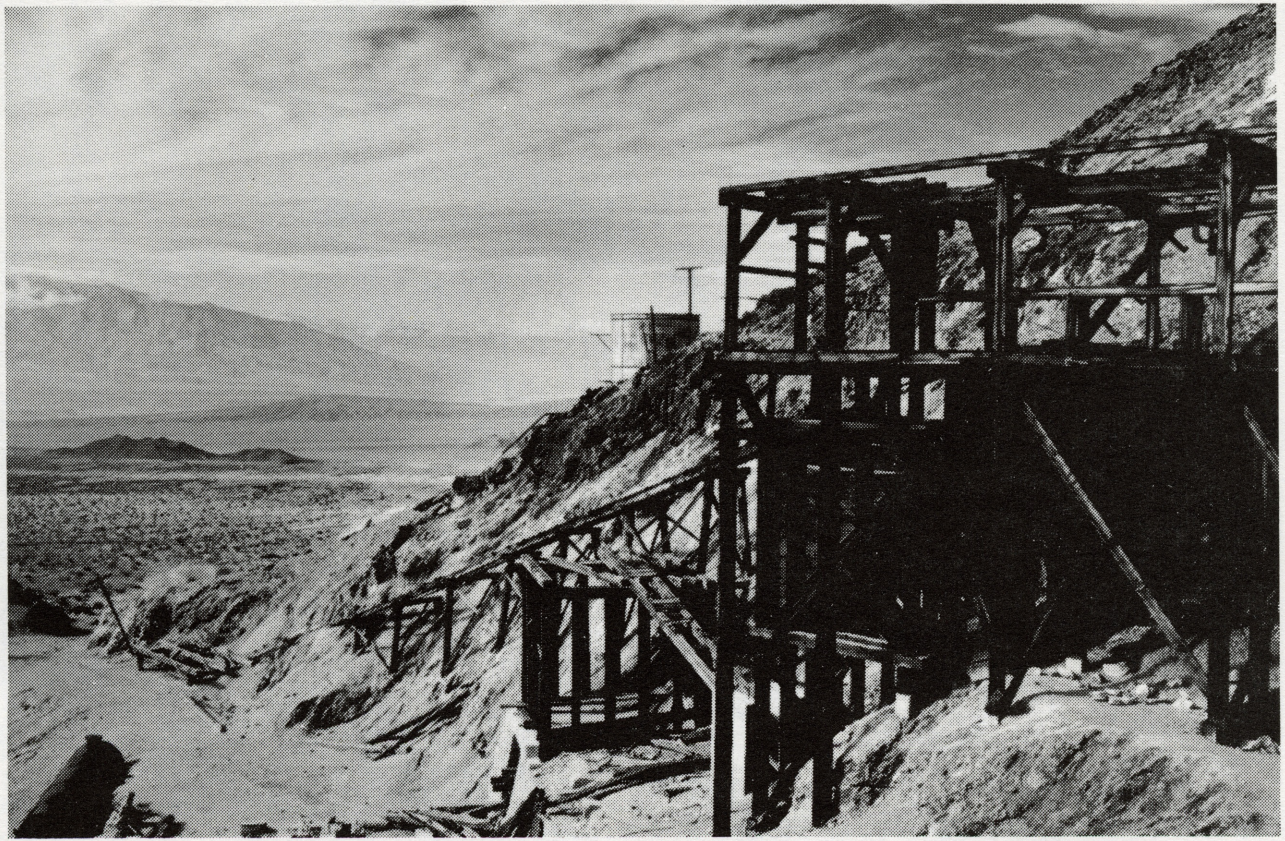


Skeleton of lower tramway terminal—Tucki Mountain in distant left.
Photo courtesy of the National Park Service.

THE KEANE WONDER MINE

THE ADVENTURE

One January morning, having heard tales of the Keane Wonder Mine and the gritty characters who found and developed it, I set out to see for myself. The four mile gravel road from the Beatty cut-off above California route 190 in Death Valley ended at the outlet of a winding, steep-sided canyon. A National Park bulletin invited me to follow the trail.

Over millennia, floods of mud and debris have tumbled down the canyon and splayed out as an alluvial fan. In the upper part of the fan skeletons of several cyanidation tanks, concrete foundations and some heavily weathered timbers, can be seen. The stamp and ball mills, generators and other machinery have long since been removed to other mills, or gutted by relic hunters. I had been told of a trail running about a mile to the north to the remains of Johnny Cyty's mill and the Keane Wonder Spring which figured in the milling process. By-passing that, I was on my way.

The lowest of thirteen heavily timbered tramway towers, set on massive concrete foundations, led my eye up along the swooping course of the cable cars running from the mill site to the upper tramway platform. Looking up the canyon only two or three of the lofty towers appeared, rapidly dwindling in size. Ascending along the northern wall, the remaining towers gradually showed themselves.

Glistening mother-of-pearl-hued rocks paved much of the lower trail from mill site to sorter and upper loading platform, some hundred feet below the Wonder Mine itself. Spectacular panoramas of Death Valley appeared continuously along the two mile walk up the canyon.

Running alongside much of the trail was a 3-inch water pipe, coming from a spring above. Periodically-spaced, U-shaped welded expansion joints provided the flexibility necessary for relief from extreme temperature fluctuations.

The 3/4-inch continuous steel cable of the aerial tramway had ruptured during latter day operations, plunging several buckets to the canyon floor, where they and their spilled ore remain, partially buried in silt.

At the 1,800 foot level were concrete slab foundations, and a ponderous single-cylinder gasoline engine, used to winch ore cars or sledges. The sorter screen, loading chute, preliminary ore crusher, and most of the upper tram station have survived. The sole evidence of habitation to be seen were some scattered boards and the mortarless low rock walls of the Cousin Jack dwellings, depredated by powerful winds.

From the mine above, ore was dumped through a vertical shaft to the tunnel one hundred feet below. Sturdy iron cars carried the ore on baby gage rails to the loading dock and ore crusher. The loading framework with intact electric motor appeared almost in working order. Using the powerful force of gravity, the tramway generated power for the preliminary ore crusher by pulling the laden buckets down to the mill; so the continuous cable would automatically return empty buckets or those filled with supplies, and sometimes with passengers.

Walking cautiously around crumbling rock foundations and farther up the trail I came to the shaft opening, down which the ore had been dumped. Further above was a water tank labeled "Los Angeles Tank & Mfg. Co." To the west of this was the main mine adit. Several lateral tunnels appeared in poor condition, one leading in an arc back through the wall to the outside, where daylight was seen. Numerous other adits were apparent. Unstable aplite rock formations and unreliable stoping mandate that none should be explored by park visitors.

Leisurely descending the trail I took snapshots of the relics, canyon and desert, sparkling in the early sunset, and drove slowly back to Furnace Creek Ranch, tired, but exultant and inspired.

Reveling in my first-hand observation of the milling and mine site, I had to read about what had gone before, starting with the definitive research publication of the National Park Service, authored by John Latscher and Linda Greene (currently a ranger in Death Valley), and later the spellbinding and authoritative work by Richard Lingenfelter, *Death Valley and the Amargosa.*

THE SEEKERS & DEVELOPERS

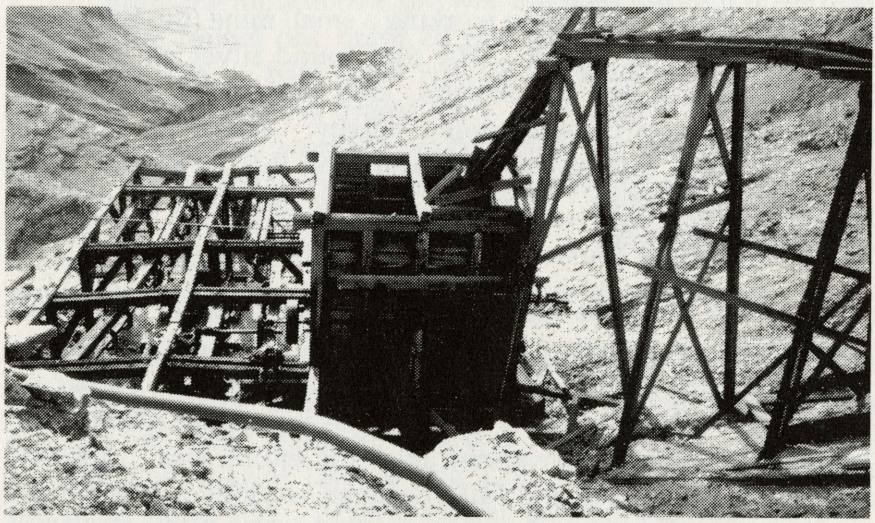
Hot-tempered Irishman Jack Keane conned Domingo Etcharren, the "one-eyed Basque butcher of Ballarat" into a sixty mile hike through the Panamint Valley, across the waist of Death Valley, halfway up an unexplored canyon in the Funeral Mountain Range. After first working a small mine (the Whipsaw) with little success, in April 1904 they found silver on the north wall. Etcharren left for Ballarat, after suggesting that Keane investigate a quartz outcropping nearby. Keane hit upon an immense ledge of free gold, so promising that he named it the Keane Wonder Mine. Hurriedly staking the claim he rejoined Etcharren in Ballarat.

After filing, he contacted Joseph De Lamar of New York who offered an earnest payment of $10,000 to work the mine for one year, with option to purchase for $160,000. De Lamar set thirty men to work. News of the discovery spread quickly and some 500 prospectors swarmed over the entire area. "Johnny-behind-the gun" Cyty and Mike Sullivan working a mile further up the canyon struck rich ore and called it the Big Bell. When Frank "Shorty" Harris and Ed Cross came up dry in the Keane region, they hiked over Daylight Pass into Nevada, where they picked up a greenish gold-bearing rock resembling a bullfrog.

News of the discovery (assisted by Shorty's ebullient grapevine) spread rapidly, attracting thousands from the Keane Wonder area. Soon those remaining at Keane found it advantageous to declare it in a South Bullfrog District to trade in on the publicity.

Reportedly there was a mine per square mile in the South Bullfrog District, which encompassed the Chloride Cliff, Big Bell and Keane Mines. No matter how persistent, they were, most of the hopefuls found nothing but blisters. Some openings which remain in overhanging canyon walls could have been accessed only by roping down, and represent heroic optimism.

Supplies for the Keane came by horse and wagon from Ballarat sixty miles away. By the end of 1904 fifteen men were working two tunnels, much less expensive than shafts, but profits were slim and De Lamar quit. Keane and Etcharren bided their time, took on six employees, worked the mine and got specimen rock running as high as $18,868 a ton.

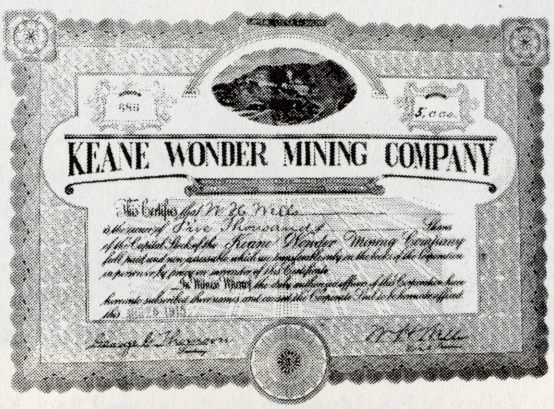


Upper tram station, looking down into Death Valley.
Photo by Rick Tullis

In 1906 J. F. Campbell bought the mine for $250,000, $50,000 in cash plus stock. Keane kept the controlling interest and became president, Campbell vice-president and Etcharren secretary. The economic depression of 1907, following the 1906 San Francisco earthquake, wiped out Campbell. Homer Wilson, financed by Thomas B. Rickey, president of the State Bank & Trust Co. of Nevada, bought the mine.

Keane invested most of his $25,000 in the recently developed mines west of Death Valley at Skidoo in the Panamints. Being fond of alcohol, which made him cantankerous, he shot people, including a deputy sheriff, and spent some time in jail. He was last reported to be back in Ireland where he killed a man and was sentenced to spend 17 years in prison.

Etcharren bought two acres of property in Darwin, which included a store and hotel, forgot mining and went into business. In 1958 his son Ted removed the house (rebuilt in 1918 after a fire) to Lone Pine. It is currently owned by Robert Palazzo, an attorney of the Los Angeles area. Mr. Palazzo kindly furnished the portrait of Etcharren and the Keane Wonder Mine certificate from his files.


KEANE WONDER MINING COMPANY

Stock certificate from Robert Palazzo collection

Death Valley N.P.S. Museum Photo labeled, Jack Keane.
(authenticity not verified)

Domingo Etcharren in later life.
Photo courtesy of Robert Palazzo

But Homer Wilson was in the Keane for keeps. He moved his family to the site and used equipment and manpower to the full. Supplies which originally came by teams from the Santa Fe railroad depot at Johannesburg to Ballarat now could be gotten from Rhyolite via the Tonopah & Tidewater railroad, saving about 120 miles, much time and heavy freight charges. He installed ore crushers, amalgamation and cyanide equipment. He built the gravity tram which took ore cars down 4,700 feet to the milling site and also powered the preliminary crusher at the upper tramway site. Wilson also tapped into the Mud Creek telephone line which ran from Rhyolite to Skidoo, a practical and enviable amenity for those times.

As water for drinking and milling was always scarce, he bought the Keane spring, six miles away on the mesa above, nearer Chloride City as a hedge against drier times.

With the tram in operation and by recycling water and retrieving and treating tailings his milling operation became a paradigm of efficiency. Bullion was sent to the mint, coined, and on return was used for the payroll and other mine expenses. In 1907 the Keane Wonder Company had 12 power plants, from a 150 hp steam boiler to three 2.5 hp gas engines. In two full years it yielded $220,000 at an average cost of $10 a ton, and a net profit of $47,000.

Legend has it that Joe Goodrich, Keane Wonder superintendent about 1910, learned that miners certified 118 degrees as the point beyond which a respectable miner would tolerate no more heat and would not work. To avoid desertions to Rhyolite or Skidoo, located higher and therefore cooler, Goodrich ordered specially made thermometers from a firm in San Francisco, guaranteed never to read higher than 118 degrees.

It is hard to believe the desiccation that can be wrought by the dry heat of the valley. Glasscock wrote that a 250 pound man, although accustomed to the desert, became exhausted and lost 50 pounds when deprived of water during three summer days. He was a goner had he not been found and re-hydrated promptly.

Harold Weight wrote that John Keith, mine super in 1911, was riding up the mile long tramway in an ore bucket when he noted a splice in the cable on the down side slowly pulling apart as it passed him. If the cable parted every bucket on the two mile journey would have dropped down like a shot towards the mill, wrecking towers and cables. Moving slowly, suspended hundreds of feet above the yawning chasm, Keith was horribly aware he still had to reach the upper loading platform before he was out of danger. Arriving there he sped to stop the tramway. With a repair crew he ran down the trail and was able to reach and repair the splice before it completely severed. He vowed he would personally inspect any splice necessary in the future. But a year and one month later the cable did rupture, stopping all operations.

In the continuing search for water several men went to dig a well near the mill, struck another gold ledge, and were promptly directed to convert the shaft into a working mine. Shortly afterwards it played out.

1911 saw the Keane the only surviving producing mine in the South Bullfrog District and tied with Skidoo (in the Panamints) for the fourth year in production. In 1912 after the mile-long tramway cable snapped, a new 27,000 pound , $7,280 cable had hardly been restrung when, five months later, all ore bodies were reportedly worked out. (The geological reasons for this are detailed in the John Anderson report of 1931.) The remaining tailings in the cyanide plant were treated and the gold recovered.

Failing in his tax payments in 1914, Wilson sold the mine at auction to the Francis Mohawk Mining Company, and stayed on as superintendent. After the mine passed through the hands of the Coen Company, and George Ishmael, Grant and Clinton Anderson leased it from E. L Cord (the automobile manufacturer). The Andersons reconditioned the remains in 1939. The tramway was refurbished with equipment from a mine in Dos Cabezas, Arizona . A 150 ton mill was installed, along with a ball mill and generator, powered by a 9-cylinder 2,000-hp Fairbanks diesel engine

On December 7, 1941 Pearl Harbor was bombed. Mining, ore processing and building stopped shortly afterwards as gold mining was suspended per the executive order of President Franklin Roosevelt. All heavy machinery except the new tramway was hauled to another site. The mine was later officially declared abandoned and became the property of the government. It is now included in Death Valley National Park.

L'ENVOI

The Keane Wonder Mine was aptly named. Starting with a silver ledge, a large gold deposit was found, the mine was worked with innovatively designed operating equipment by men who defied the isolation and punishing weather, additional gold was discovered near the mill, reworked tailings yielded more gold, and it produced about $1,000,000 in an eight year period.

The Keane had the distinction of being the only noble mineral mine to own and operate a steam tractor. "Old Dinah" was used to haul borax ore at Calico for a while to replace the 20-mule teams; then at Ivanpah and Carbonate to haul silver ore. Her tonnage proved insufficient to provide traction for her power. As the diagonal steel treads on her huge driving wheels kept slipping while hauling heavy loads, she was put out to pasture. After her resurrection in 1910 by J. R. Lane, a Calico merchant, she

was bought by Wilson to pull ore over Daylight Pass to Rhyolite, by then a booming railhead.

After a first successful venture Old Dinah was converted to an oil burner for the next try. Near the summit she blew a flue and died at the pass. She was left by the side of the road, a fallen woman.

Stripped of her engine she rusted for over 20 years, until Harry Gower of the Pacific Coast Borax Company decided she belonged in the Furnace Creek area. In 1922 he started to tow her when Herman "Bob" Eichbaum (owner of Stove Pipe Wells Village) arrived to stake his claim. Gower allowed he had the backing of a deputy sheriff. Eichbaum reconsidered. The procession wound up without Eichbaum, at Furnace Creek (formerly the borax company's Greenland) Ranch.

Even without her engine, "Old Dinah" still fascinates photographers. At the ranch entrance she is a picturesque monument to mining, and a background for the campfires of the Death Valley '49ers annual encampments.

Mines were dug and worked in almost every area of Death Valley, particularly concentrated in the Funeral and Panamint Mountains and the Amargosa Valley. Gold was discovered almost simultaneously at Keane, Bullfrog, Skidoo, Harrisburg and other places. No matter how thrilling the prospects, nor how hard the mines were worked, none came close to the mythological Lost Breyfogle or the "Mother Lode. " They proved to be just gold pockets.

Entrepreneurs who worked the mines were lucky to end up in the black. Those who sold their mines, and stock promoters, had a chance to become wealthy. As is always true, merchants, shopkeepers and barkeeps who could survive usually did well. Investors seldom broke even. However, mining stock certificates do make appealing wallpaper.

TAKE A HIKE

For a fascinating look into the past take a walk to the Keane Wonder Mill and Mine. You should be in good physical condition, the trail is solid, and there is no exposure. Although the tailings were reworked several times, you might chance on some gold color, a vein of quartz associated with silver or gold, or even a gold nugget. If you do, leave it where you found it. Follow the park rules and never enter any mines, shafts, tunnels or wells.

ACKNOWLEDGEMENTS

I am greatly indebted to the research and writing of many inspired and diligent authors. To my knowledge I have used no direct quotations. Dave Heffner deserves special credit for his vast knowledge of the Death Valley area and his contributions to this bibliography. Author Richard Lingenfelter kindly reviewed the manuscript for historical accuracy. Unless otherwise noted, illustrations are courtesy of Death Valley National Park Museum Library.

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